

## REMARKS

Claims 36-44, 46-92, and 102 stand rejected under 35 USC 102(f). Applicants have cancelled claims 63-92. Applicants respectfully traverse the rejection as to claims 36-44, 46-62, and 102.

The Protest under 37 CFR 1.291 protested the allowance of claims 36-92 and 102 of the present Detwiler reissue application, Serial No. 09/825,882, on the basis that they were broader in scope than claims 22 to 32 (suggesting that claims 36-92 and 102 represented an improper broadening under 35 USC 251), and that claims 36-92 were barred by interference estoppel.

As to claims 36-44, 46-62, and 102, the protest is ill founded since the controlling legal authority does not support the Protestor's assertions, and there can be no estoppel against claims 36-44, 46-62, and 102 since these claims are patentable over the counts and proposed counts in Detwiler v. Bobba Interference No. 104,631.

The underlying facts are not in issue. There was an Interference No. 104,631, that involved a Bobba application

Serial No. 09/078,196 owned by PSC, and a Detwiler patent 5,684,289 owned by NCR. The above Detwiler reissue application 09/825,882 is based on the Detwiler '289 patent.

During the course of the interference, it was recognized that the interference counts (which corresponded to '289 patent claims 1 and 18) should have been asserted in an earlier NCR patent 5,229,588, filed 10/30/91, and that other more limited claims should be added to the '289 patent.<sup>1</sup>

To correct this situation, Detwiler filed the above reissue application based on the '289 patent, to which he initially added new claims 36-58.

Claims 36-45 were based upon and narrower than claim 1. Claims 46-58 were based upon and narrower than claim 18. Claims 36-58 were added more than two years after the issuance of the '289 patent, but, as noted, claims 36-45 were narrower than claim 1 and claims 46-58 were narrower than claim 18. Both claims 1 and 18 were present at the time claims 36-58 were added.

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<sup>1</sup> The NCR Detwiler '588 patent is prior art to the later NCR Detwiler '289 patent.

Thereafter, a disclaimer was filed as to '289 patent claims 1 and 18.

Claims 59-62 were added after the disclaimer of '289 patent claims 1 and 18. Claims 59-61 were based upon and narrower than claim 10. Claim 62 was based upon and narrower than claim 11. Claims 59-62 were added more than two years after the issuance of the '289 patent, but, as noted, claims 59-61 were narrower than claim 10 and claim 62 was narrower than claim 11. Both claims 10 and 11 were present at the time claims 59-62 were added.

Thereafter, a disclaimer was filed as to '289 patent claims 2-17, 19-21, 33-35.

Claims 63-92 were added after the second disclaimer. Applicants have cancelled these claims.

Claim 102 was added after the second disclaimer, but was a restatement of dependent claim 45 into independent form, not later added subject matter.

For convenient reference, the following table shows the dates that the various claims 36-62 and 102 were added to the

present reissue application, as well as the claims that these added claims were based on, and the dates of the two relevant disclaimers filed by NCR:

Reissue appln. Claims	Date added	Based on/ narrower than	Date base claim disclaimed
36-45	3/23/01	1	4/2/01
46-58	3/23/01	18	4/2/01
59-61	5/15/01	10	5/16/01
62	5/15/01	11	5/16/01
102	2/13/2006	45, 1	4/2/01

Claims 36-62 and 102 of the present reissue application did not broaden the claims pending at the time these claims were filed, and hence, they are not invalid under the two-year limit in 35 U.S.C. §251 for filing a broadening reissue

The two-year limit for filing a broadening reissue is contained in the fourth paragraph of 35 U.S.C. § 251, which provides that:

No reissue patent shall be granted enlarging the scope of the claims of the original patent unless applied for within two years from the grant of the original patent.

PSC cites the case of Vectra Fitness Inc. v. TNWK Corp., 162 F.3d 1379 (Fed. Cir. 1998) in support of its assertion that claims 36-92 and 102 are invalid under 35 U.S.C. § 251. As to remaining claims 36-62 and 102, that case is inapposite here.

In Vectra Fitness broad claims were disclaimed *before* new claims were added. Thus, at the time the new claims were added, the new claims were broader than any other claims in the patent, and hence the new claims constituted a broadening of the patent. As quoted by PSC, the Federal Circuit observed that if that Court were to allow the practice of reclaiming subject matter that had already been disclaimed, the public could never rely on the scope of the non-disclaimed claims. Vectra Fitness, 162 F.3d at 1384. (Bobba Br. 6)

This is clearly not the situation here. The public can rely on precisely what was being claimed in the '289 patent and in the present reissue application. There was no reclaiming of subject matter that had previously been disclaimed, and there was no possibility of misleading the public. Stated otherwise, the nature of the claims in the '289 patent and the present reissue application was always clear and available for public inspection.

Moreover, the Spectra Fitness case is based on a statutory construction of 35 U.S.C. 253, to arrive at what Bobba characterizes as "a temporal fiction". (Bobba page 6) The fiction is that after a disclaimer is filed it is treated as being part of the original patent. The issue here, however, is for what period of time the original patent takes on this fictional character. This is answered by § 253, which provides that:

Such disclaimer... shall *thereafter* be  
considered as part of the original patent...  
(Emphasis added.)

In short, the statute is clear that it is only for the period *after* a disclaimer has been filed that the disclaimer shall be treated as part of the original patent.

The Federal Circuit ruling in Vectra Fitness is not contra. In Vectra Fitness, the new claims were added *after* the disclaimer had been filed, not *before*, as in the present application. As a consequence, In Vectra Fitness the Court observed that, if that practice were permitted, it would give rise to the potential uncertainty of the public never knowing what portion of the disclaimed subject matter might be reclaimed.

While no reported case has been found that deals with the present situation, the statute appears clear on its face, in saying that a disclaimer shall *thereafter* be considered as being part of the original patent. Nor is the word "thereafter" mere surplusage. Sections 252, 254 and 255 all use the word "thereafter" to provide that reissue patents and corrected patents will affect only "causes *thereafter* arising". 35 USC §252, 254 & 255 (Emphasis added). In contrast, there is no "thereafter" in Section 256. Thus, Section 256 does not limit patents in which corrections have been made in the named inventor to apply only to causes that arise after the correction has been made.

Thus, Congress used the term "thereafter" selectively and deliberately in Sections 252 to 255. This is particularly true, in Section 253, where Congress clearly provided that when a disclaimer is filed it shall *thereafter*, not beforehand, be treated as part of the original patent.

Since claims 36-62 were added before their corresponding base claims were disclaimed, claims 36-62 did not broaden or enlarge the scope of the claims of the '289 patent in violation of 35 USC 251. Claim 102 was added after the second disclaimer, but was a restatement of dependent claim 45, which was submitted

prior to the first disclaimer. Therefore, claim 102 did not broaden or enlarge the scope of the claims of the '289 patent in violation of 35 USC 251.

Claims 36-62 and 102 of the present reissue application are also patentable over the counts and proposed counts of the Detwiler v. Bobba Interference No. 104,631. Bobba application Serial No. 09/078,196 fails to disclose all of the features of claims 36-62 and 102. Therefore, no interference estoppel exists.

With respect to independent claim 36, Bobba application Serial No. 09/078,196 fails to disclose

the reflected laser beam from the spinner alternately striking at least one pattern mirror of the first group and then at least one pattern mirror of the second group, and repeating this alternating operation multiple times as the beam is reflected from a single facet of the spinner during a single rotation of the spinner, to reflect scanning beams alternately and repetitively through the first and second apertures as the spinner rotates a single rotation.

With respect to independent claim 37, Bobba application Serial No. 09/078,196 fails to disclose



the first group of pattern mirrors including a plurality of pattern mirrors spaced apart from one another and located between the polygon spinner and the second group of pattern mirrors, and

the polygon spinner directing the laser beam alternately at the pattern mirrors of the first group that are spaced apart and through the spaces between those pattern mirrors to reach the pattern mirrors of the second group as the polygon spinner rotates.

With respect to independent claim 39, Bobba application Serial No. 09/078,196 fails to disclose

wherein multiple facets of the polygon spinner direct the laser beam alternately multiple times, during each rotation of the polygon spinner, to at least one pattern mirror of the first group and then to at least one pattern mirror of the second group, to reflect the laser beam alternately through the first and second apertures multiple times as the polygon spinner rotates a single rotation.

With respect to independent claim 40, Bobba application Serial No. 09/078,196 fails to disclose

the first group of pattern mirrors including a plurality of pattern mirrors spaced apart from one another and located between the polygon spinner and the second group of pattern mirrors.

With respect to independent claim 41, Bobba application  
Serial No. 09/078,196 fails to disclose

the first group of scanning beams reflecting off multiple mirrors of the first subset of pattern mirrors of the first group to the second subset thereof, then reflecting off multiple mirrors of said second subset to the third subset thereof, and then off at least one mirror of said third subset out the first aperture,

the second group of scanning beams reflecting off multiple mirrors of the first subset of pattern mirrors of the first group to the second subset thereof, then reflecting off multiple mirrors of said second subset to the third subset thereof, and then off at least one mirror of said third subset out the first aperture.

With respect to independent claim 43, Bobba application  
Serial No. 09/078,196 fails to disclose

the first group of scanning beams reflecting off the first subset of pattern mirrors of the first group to the second subset thereof, then reflecting off said second subset to the third subset thereof, and then off said third subset out the first aperture,

the second group of scanning beams reflecting off the first subset of pattern mirrors of the first group to the second subset thereof, then reflecting off said second subset to the third subset thereof, and then off said third subset out the first aperture,

With respect to independent claim 44, Bobba application  
Serial No. 09/078,196 fails to disclose

a polygon spinner having mirrored facets receiving the laser beam and rotating to reflect the laser beam to produce a single reflected beam directed in a plurality of directions as the spinner rotates, the reflected beam striking the pattern mirrors to produce a plurality of scanning beams, including a first group of scanning beams, a second group of scanning beams, and a third group of scanning beams; and

With respect to independent claim 46, Bobba application  
Serial No. 09/078,196 fails to disclose

generating the first group of scanning beams comprises directing the laser beam to a first set of pattern mirrors, reflecting the beam from those mirrors to a second set of pattern mirrors and reflecting the beam from those mirrors to at least one additional pattern mirror;

...

generating the second plurality of scanning beams comprises directing the laser beam to a third set of pattern mirrors, reflecting the beam from those mirrors to a fourth set of pattern mirrors and reflecting the beam from those mirrors to a fifth set of pattern mirrors;

With respect to independent claim 52, Bobba application  
Serial No. 09/078,196 fails to disclose

rotating the mirror polygon and reflecting the single laser beam from each of the facets of the polygon, as the

polygon is rotating, to form from the single laser beam a plurality of scanning beams that pass through both horizontal and vertical transparent members;

...

generating the first group of scanning beams comprises directing the laser beam to a first set of pattern mirrors, reflecting the beam from those mirrors to a second set of pattern mirrors and reflecting the beam from those mirrors to at least one additional pattern mirror;

...

generating the second plurality of scanning beams comprises directing the laser beam to a third set of pattern mirrors, reflecting the beam from those mirrors to a fourth set of pattern mirrors and reflecting the beam from those mirrors to at least one further mirror;

With respect to independent claim 56, Bobba application  
Serial No. 09/078,196 fails to disclose

the polygon spinner having four facets, two of the facets being angled at angles closer to their respective opposite facets than to their two adjacent facets, and

the beam from one pair of opposite facets of the polygon spinner striking one set of mirrors of the first group, and the beam from the other pair of opposite facets striking a different set of mirrors of the first group.

With respect to independent claim 58, Bobba application  
Serial No. 09/078,196 fails to disclose

constructing the mirrored polygon to have four facets, two of the facets being angled at angles closer to their

respective opposite facets than to their two adjacent facets,

...

generating the first group of scanning beams comprises directing the laser beam from one pair of opposite facets of the mirrored polygon to a first set of pattern mirrors,

...

generating the second plurality of scanning beams comprises directing the laser beam from the second pair of opposite facets of the mirrored polygon to a second set of pattern mirrors,

With respect to independent claim 59, Bobba application  
Serial No. 09/078,196 fails to disclose

(h) the mirrors of the first group being divided into a first and second set,

(i) the first set being positioned closer to the spinner than the second set,

(j) the spinner directing the laser beam between the mirrors of the first set to strike the mirrors of the second set.

With respect to independent claim 60, Bobba application  
Serial No. 09/078,196 fails to disclose

(f) a first group of mirrors for reflecting the laser beam from the spinner, a second group of mirrors for reflecting the scanning beam from the first group of mirrors, and a third group of mirrors for reflecting the scanning beam from some of the mirrors in the second group of mirrors; and

...

(h) the spinner having an even number of facets greater than two, each of the facets being at different angles with respect to a predetermined axis, and the facets opposite one another being disposed at angles closer to one another than to any of the other facets.

With respect to independent claim 62, Bobba application Serial No. 09/078,196 fails to disclose

(g) arranging the spinner to have an even number of facets, with the facets being at different angles with respect to a predetermined axis and with the facets opposite to one another in the spinner being at angles closer to one another than to any of the other facets.

With respect to independent claim 102, Bobba application Serial No. 09/078,196 fails to disclose

wherein the pattern mirrors include

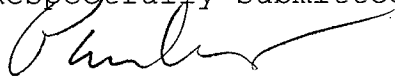
a first group of mirrors for reflecting the laser beam from the spinner;

a second group of mirrors for reflecting the laser beam from the first group of mirrors, including at least one mirror positioned and angled to reflect an incident beam in a substantially vertical direction to scan the bottom of an article and at least one mirror is positioned and angled to reflect an incident beam rearwardly to scan the forward side of the article; and

a third group of mirrors for reflecting the laser beam from some of the mirrors in the second group of mirrors.

Applicants now respectfully request that the pending claims  
be allowed.

Respectfully submitted,



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Paul Martin  
Attorney for Applicants  
(937) 445-2990

Dayton, OH

**JAN 22 2007**